

=> S L8

L9 12 L8

=> D BIB ABS HITSTR 1-12

L9 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:449046 CAPLUS

DN 140:128470

TI The synthesis and characterization of some Group 14 compounds containing the 2,4,6-(CF₃)₃C₆H₂, 2,6-(CF₃)₂C₆H₃ or 2,4-(CF₃)₂C₆H₃ ligands

AU Batsanov, Andrei S.; Cornet, Stephanie M.; Dillon, Keith B.; Goeta, Andres E.; Thompson, Amber L.; Xue, Bao Yu

CS Chemistry Department, University of Durham, Durham, DH1 3LE, UK

SO Dalton Transactions (2003), (12), 2496-2502

CODEN: DTARAF; ISSN: 1477-9226

PB Royal Society of Chemistry

DT Journal

LA English

OS CASREACT 140:128470

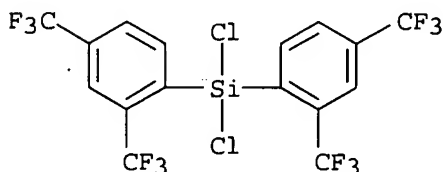
AB New (aryl)₂EC₂ and (aryl)EC₃ compds. [E = Si, Ge or Sn; aryl = 2,4,6-(CF₃)₃C₆H₂ (Ar), 2,6-(CF₃)₂C₆H₃ (Ar') and/or 2,4-(CF₃)₂C₆H₃ (Ar'')] were prepared by reactions of EC₄ with 2 equivalent of ArLi or of a Ar'Li/Ar''Li mixture. The latter gives predominantly the less sterically hindered product Ar''₂EC₂ for E = Si or Ge, but Ar'₂SnCl₂ for the larger central atom. The products were characterized by elemental anal., ¹⁹F and (where appropriate) ¹¹⁹Sn NMR spectroscopy, and single-crystal x-ray diffraction for Ar''₂SiCl₂, ArGeCl₃, Ar₂GeCl₂, Ar''₂GeCl₂, Ar₂SnCl₂ and Ar'₂SnCl₂. For E = Si the synthesis is complicated by Cl/F exchange: besides Ar'₂SiCl₂ and Ar''₂SiCl₂, ¹⁹F NMR spectroscopy identified in solution Ar''₂SiF₂ and Ar'₂SiF₂. The latter was isolated and its x-ray structure determined. In all compds., the E atom has a strongly distorted tetrahedral coordination, supplemented by short intramol. E...F contacts (secondary coordination) with o-CF₃ group(s).

IT 650583-78-1P 650583-79-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystal structure; synthesis and structural characterization of some Group 14 compds. containing trifluoromethylphenyl ligands)

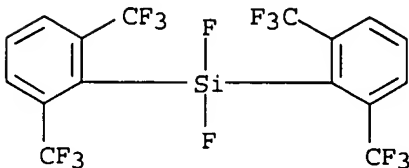
RN 650583-78-1 CAPLUS

CN Silane, bis[2,4-bis(trifluoromethyl)phenyl]dichloro- (9CI) (CA INDEX NAME)



RN 650583-79-2 CAPLUS

CN Silane, bis[2,6-bis(trifluoromethyl)phenyl]difluoro- (9CI) (CA INDEX NAME)

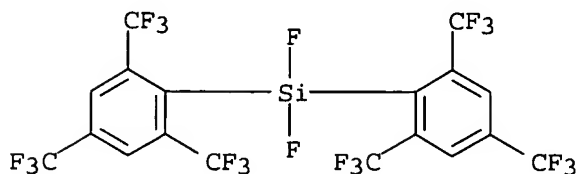


IT 148826-31-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis and structural characterization of some Group 14 compds.
containing trifluoromethylphenyl ligands)

RN 148826-31-7 CAPLUS

CN Silane, difluorobis[2,4,6-tris(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:687553 CAPLUS

DN 128:22661

TI Pd(II)-catalyzed oxidative homocoupling of aryl-metal compounds using
acrylate dibromide derivatives as effective oxidants

AU Yamaguchi, Shigehiro; Ohno, Shigeki; Tamao, Kohei

CS Institute Chemical Research, Kyoto University, Uji, 611, Japan

SO Synlett (1997), (10), 1199-1201

CODEN: SYNLES; ISSN: 0936-5214

PB Thieme

DT Journal

LA English

AB In the presence of acrylate dibromides, palladium(II)-complexes catalyze
the oxidative homocoupling of arylstannanes, areneboronic acids, and
arylfluorosilanes to afford biaryls in good yields.

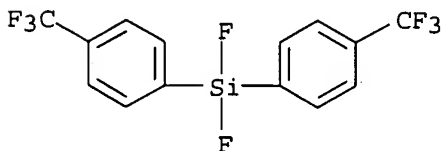
IT 199275-74-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(palladium-catalyzed oxidative homocoupling of arylmetals using
acrylate dibromides as oxidants)

RN 199275-74-6 CAPLUS

CN Silane, difluorobis[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:661099 CAPLUS

DN 125:300833

TI Process for producing unsaturated organic compounds such as biaryls or
arylpdridine derivatives by coupling of organohalosilane with halobenzenes
or halopyridines

IN Hatanaka, Yasuo; Hagiwara, Emiko; Gouda, Ken-ichi; Hiyama, Tamejiro

PA Sagami Chemical Research Center, Japan

SO PCT Int. Appl., 76 pp.

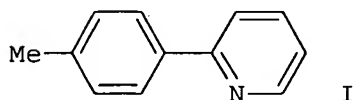
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9628401	A1	19960919	WO 1996-JP570	19960308
	W: US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 08310972	A2	19961126	JP 1996-51353	19960308
PRAI	JP 1995-51273	A	19950310		
	JP 1995-51274	A	19950310		
OS	CASREACT 125:300833; MARPAT 125:300833				
GI					



AB A process whereby organic compds., such as biaryls or alkenylallenes, which are useful as functional organic materials such as liquid crystals, drugs or pesticides can be efficiently synthesized in a short step. This process comprises reacting organic halosilanes $R_1Si(R_2)_mX_3-m$ [R_1 = (un)substituted aryl, alkenyl, or alkyl; R_2 = R_1 , lower alkyl; X = halo; m = 0-2; provided when R_1 = alkyl, m = 0] with organic halides R_3-Y_1 [R_3 = (un)substituted aryl, 1-alkenyl, or 2-alkenyl; Y_1 = halo] in the presence of a base or in the presence of a catalyst of a transition metal of the group X having a trialkylphosphine ligand and a fluoride to thereby give unsatd. organic compds. represented by the following general formula R_1-R_3 (R_1 , R_3 = same as above). Thus, a suspension of 588.0 mg NaOH in 5 mL THF was cooled to 0°, followed by adding dropwise 600 mg p-MeC₆H₄SiMeCl₂, and the resulting mixture was stirred at room temperature for 3 h. To the reaction mixture

were added 162.4 mg 2-bromopyridine and a catalyst solution prepared by stirring 1.8 mg Pd(OAc)₂ and 4.3 mg Ph₃P in THF at room temperature for 40 min, and the resulting mixture was stirred at 60° for 15 h to give, after workup and silica gel chromatog., the title compound (I) in 95.8% yield.

IT 1536-24-9

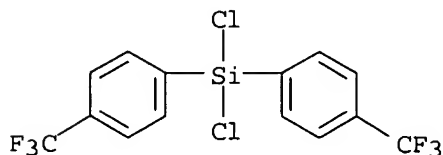
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of unsatd. organic compds. such as biaryls or arylpyridine derivs.

by coupling of organohalosilane with halobenzenes or halopyridines)

RN 1536-24-9 CAPLUS

CN Silane, dichlorobis[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1993:472729 CAPLUS

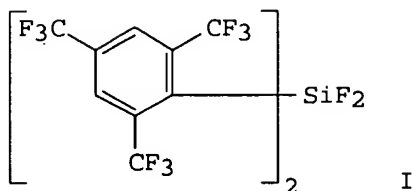
DN 119:72729

TI Synthesis and structure of difluorobis[2,4,6-tris(trifluoromethyl)phenyl]silane

AU Buijink, Jan Karel; Noltemeyer, Mathias; Edelmann, Frank T.

CS Inst. Anorg. Chem., Univ. Goettingen, Goettingen, W-3400, Germany

SO Journal of Fluorine Chemistry (1993), 61(1-2), 51-6
 CODEN: JFLCAR; ISSN: 0022-1139
 DT Journal
 LA German
 GI

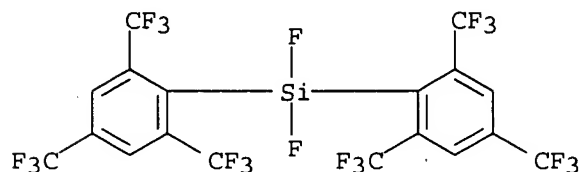


AB 2,4,6-Tris(trifluoromethyl)phenyllithium (RFLi) reacts with SiCl₄ in a 2:1 molar ratio to give (RF)₂SiF₂ (I) exclusively. The formation of I is a result of Cl/F exchange between an intermediate (RF)₂SiCl₂ and the CF₃ groups of the ligand. The structure of I was determined by x-ray crystallog. The preparation of (RF)₂SbCl is also described.

IT **148826-31-7P**
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and crystal and mol. structure of)

RN 148826-31-7 CAPLUS

CN Silane, difluorobis[2,4,6-tris(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:408887 CAPLUS

DN 115:8887

TI Condensation reactions of dichlorosilane initiated by accelerated electrons

AU Korshunov, A. I.; Pecherkin, A. S.; Pozderskii, Yu. A.; Sidorov, V. I.; T'solkovskii, T. I.; Chernyshev, E. A.; Sheludyakov, V. D.

CS Gos. Nauchno-Issled. Inst. Khim. Tekhnol. Elementoorg. Soedin., Moscow, USSR

SO Zhurnal Obshchei Khimii (1990), 60(11), 2632-3
 CODEN: ZOKHA4; ISSN: 0044-460X

DT Journal

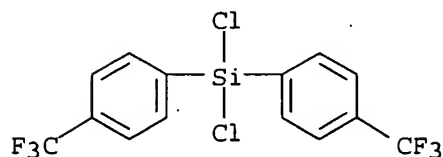
LA Russian

OS CASREACT 115:8887

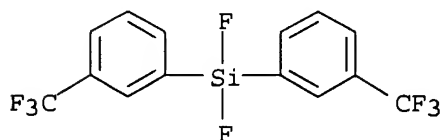
AB Gas-phase reaction of H₂SiCl₂ with RCl (R = Ph, 4-CF₃C₆H₄, 2-thienyl) at 200-300° and irradiation by accelerated electrons having 1.5 MeV energy gave mixts. of RSiHCl₂ and R₂SiCl₂. E.g., reaction of H₂SiCl₂ with PhCl gave 42% PhSiHCl₂ and 25% Ph₂SiCl₂.

IT **1536-24-9P**
 RL: FORM (Formation, nonpreparative); PREP (Preparation)
 (formation of, by condensation reaction of dichlorosilane with chloroarene initiated by accelerated electrons)

RN 1536-24-9 CAPLUS
CN Silane, dichlorobis[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1980:586482 CAPLUS
DN 93:186482
TI Use of antimony(V) fluoride intercalated in graphite as fluorinating reagent in organosilicon and -germanium chemistry
AU Corriu, R. J. P.; Fernandez, J. M.; Guerin, C.
CS Lab. Organomet., Univ. Sci. Tech. Languedoc, Montpellier, 34060, Fr.
SO Journal of Organometallic Chemistry (1980), 192(3), 347-52
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA English
OS CASREACT 93:186482
AB The use of SbF5 intercalated in graphites as fluorinating reagent of organosilicon and -germanium derivs. is described. Whereas Si-O and Si-Cl bonds are readily cleaved, Si-H and Si-S bonds are only reactive in bifunctional silanes. Ge-X bonds (X = Br, Cl, OR, H) are unreactive. Allyl-silicon and allyl-germanium bonds are broken under mild conditions and in high yields, leading to the corresponding fluorosilane or fluorogermane. With bifunctional silanes, the difluorinated derivs. are always obtained.
IT **21993-35-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 21993-35-1 CAPLUS
CN Silane, difluorobis[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1969:115213 CAPLUS
DN 70:115213
TI Organic fluorine-silicon compounds. IV. Preparation of diaryldifluorosilanes and triarylmmonofluorosilanes
AU Kuroda, Katsuhiko; Ishikawa, Nobuo
CS Fac. Eng., Tokyo Inst. Technol., Tokyo, Japan
SO Nippon Kagaku Zasshi (1969), 90(3), 322-3
CODEN: NPKZAZ; ISSN: 0369-5387
DT Journal
LA Japanese
AB (m-MeC6H4)2SiCl2, b2.5 141-2°, and (m-ClC6H4)2SiCl2 (I), b2 156-7°, were prepared from SiCl4 and the corresponding Grignard reagents in 60.5 and 58% yields, resp. I (39 g.), 45 g. Na2SiF6, and 18 ml. Tetralin heated 4 hrs. gave 26.5 g. (m-ClC6H4)2SiF2, b2

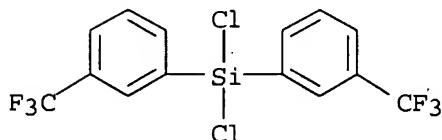
114-15°. Similarly the following Ar₂SiF₂ were prepared (Ar, b.p., and % yield given): p-MeC₆H₄, b₅ 128-30°, 40; p-ClC₆H₄, b₃ 127-8°, 70; m-CF₃C₆H₄, b₇ 112-13°, 57. (p-ClC₆H₄)₂SiCl₂ (60 g.) and 66.6 g. SbF₃ reacted <100° and heated at 90-100° for 3 hrs. gave 39.4 g. (p-ClC₆H₄)₂SiF₂. Similarly the following Ar₂SiF₂ were prepared (Ar, b.p., and % yield given): m-MeC₆H₄, b₂₇ 162-4°, 62; p-MeC₆H₄, b₄ 123-5°, 61; m-CF₃C₆H₄, b₈ 114°, 68. m-CF₃C₆H₄MgBr in 100 ml. tetrahydrofuran prepared from 22.5 g. m-CF₃C₆H₄Br and 2.43 g. Mg and treated with 33.1 g. Ph₂SiF₂ in 60 ml. tetrahydrofuran at -2 to -5°, then at room temperature for 2 hrs. and finally at reflux temperature 3 hrs. gave 22.1 g. Ph₂SiF(C₆H₄CF₃-m), b₂ 149-51°. Similarly the following Ar₂Ar'SiF were prepared (Ar, Ar', b.p., and % yield given): Ph, Ph, b_{2.5} 160-2°, 84; Ph, Me, b₂ 92-3°, 70; m-MeC₆H₄, m-MeC₆H₄, b₂ 182-8°, 52; p-MeC₆H₄, p-MeC₆H₄, b₃ 186-90° (m. 108-10°), 36; p-ClC₆H₄, p-ClC₆H₄, b₂ 210-12°, 70; m-CF₃C₆H₄, m-CF₃C₆H₄, b₂ 143-5°, 52.

IT 565-11-7P 21993-35-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

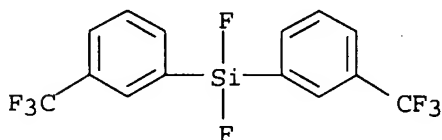
RN 565-11-7 CAPLUS

CN Silane, dichlorobis[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 21993-35-1 CAPLUS

CN Silane, difluorobis[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1959:28899 CAPLUS

DN 53:28899

OREF 53:5197a-d

TI Halogenated arylsilanes

PA Midland Silicones Ltd.

DT Patent

LA Unavailable

FAN.CNT 1

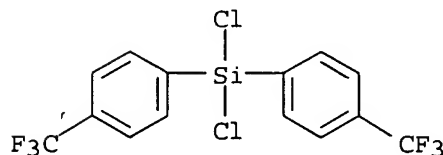
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 800280		19580820	GB	
AB	An economical continuous process comprises mixing m-ClC ₆ H ₄ CF ₃ (I) 1064 and MeSiHCl ₂ (II) 746, heating to 563-80° for 15.8 seconds, and fractionally distilling to obtain m-CF ₃ C ₆ H ₄ SiMeCl ₂ 399 parts, b. 31-2°, d ₂₅ 1.320, n ₂₅ 1.4635. Similarly I 605.2 and HSiCl ₃ , (III) 461 at 570-9° for 6.32 sec. yield m-CF ₃ C ₆ H ₄ SiCl ₃ 222.5 parts, b ₁ 28-9°, d ₂₅ 1.449, n ₂₅ 1.4680. p-ClC ₆ H ₄ CF ₃ 1169 and II 818 at 540-55° for 22.2 sec. yield p-CF ₃ C ₆ H ₄ SiMeCl ₂ 316.9 parts, b ₁ 38.4°, d ₂₅ 1.326, n ₂₅ 1.4633. 1,2,4-C ₆ H ₃ Cl ₃ 1226 and III 900 at 600° for 13 sec. yield ClC ₆ H ₄ SiCl ₃ 180 and Cl ₂ C ₆ H ₃ SiCl ₃ 458 parts,				

b8 125°, d25 1.541. 3,4-Cl₂C₆H₃CF₃ 1127 and II 603 at 545-55° for 13.4 sec. yield Cl(CF₃)C₆H₃SiMeCl₂ 299.3 parts, b10 100°, d25 1.444, n 1.4864. An equimolar mixture of 2,4-Cl₂C₆H₃CF₃ and II yielded Cl(CF₃)C₆H₃SiMeCl₂, n25 1.4898-919, d25 1.430-40, b14 107-8°. o-ClC₆H₄CF₃ (1 mole) and 1.5 moles II at 525-60° for 13-14 sec. yielded o-CF₃C₆H₄SiMeCl₂, n25 1.4796, d25 1.362, b10 80°. Me₂SiHCl 550 and m-ClC₆H₄CF₃ 954 at 568-614° for 15.2 sec. yield m-CF₃C₆H₄SiMe₂Cl 150.5 parts, d25 1.203, n25 1.4553, b29 95-6° p-BrC₆H₄CF₃ and H₂SiCl₂ yield (p-F₃CC₆H₄)₂SiCl₂. PhSiHCl₂ and iodopentachlorobiphenyl yielded Cl₅C₁₂H₄SiPhCl₂. C₆Cl₆ and MeSiHCl₂ yield C₆Cl₅SiMeCl₂. 3,5-(F₃C)₂C₆H₃Cl 915 and II 635 at 509-27° for 16 sec. yield 3,5-(F₃C)₂C₆H₃SiMeCl₂ 308.7 parts, b29-30 94-5°, d25 1.436, n25 1.4280.

IT 1536-24-9, Silane, dichlorobis(α,α,α-trifluoro-p-tolyl)-
(preparation of)

RN 1536-24-9 CAPLUS

CN Silane, dichlorobis[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1958:30196 CAPLUS

DN 52:30196

OREF 52:5465h-i,5466a-c

TI Doubly substituted arylmethyl silicon compounds

IN Frost, Lawrence W.; Gainer, Gordon C.; Lewis, Daniel W.

PA Westinghouse Electric Corp.

DT Patent

LA Unavailable

FAN.CNT 1

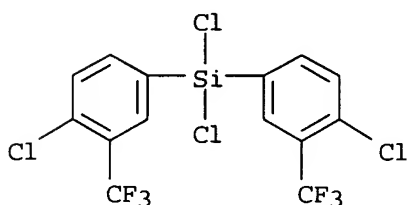
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2802017		19570806	US	
AB	<p>Organosilicon compds. containing Me and 4-chloro-3-(trifluoromethyl)phenyl groups attached to Si were prepared by reaction of 4-chloro-3-(trifluoromethyl)phenyl-magnesium bromide (I) with chloro or alkoxy silanes. Thus, 24 g. Mg was added to 120 g. Me₃SiCl in Et₂O and 260 g. 4-bromo-3-(trifluoromethyl)chlorobenzene (II), the mixture refluxed 15 hrs., after filtration the liquid portion poured into ice-HCl, the organic layer washed, dried, and distd, yielding 52% (crude) [4-chloro-3-(trifluoromethyl)phenyl]trimethylsilane (III), b. 213.9°, m. -32 to -34°, n₂₅D 1.4663, d₂₅ 1.1664. Dimethylbis[4-chloro-3-(trifluoromethyl)phenyl]silane (IV), b. 326.2°, m. 45.4°, n₂₅D 1.5077, d₂₅ 1.3747, was prepared similarly. [4-Chloro-3-(trifluoromethyl)phenyl]dimethylethoxysilane (V), b1-2 65-7°, was obtained from 2 moles I with 3 moles Me₂Si(OEt)₂. V with 50% H₂SO₄ yielded bis[4-chloro-3-(trifluoromethyl)phenyl]tetramethyldisiloxane (VI), b0.7 130-1°, n₂₅D 1.4838. [4-Chloro-3-(trifluoromethyl)phenyl]methyldiethoxysilane (VII), b4 90°, n₂₅D 1.4518, was obtained from 2 moles I with 3 moles MeSi(OEt)₃. VII with (Me₃Si)₂O in the presence of 75% H₂SO₄ gave a colorless oil (VIII). Addition of SiCl₄ to I yielded bis[4-chloro-3-(trifluoromethyl)phenyl]dichlorosilane (IX), b1, 112-15°. Addition of IX to MeMgBr gave bis[4-chloro-3-(trifluoromethyl)phenyl]methylchlorosilane (X), b1</p>				

128-39°. Hydrolysis of X in the presence of 85% H₂SO₄ yielded 1,3-dimethyltetraakis [4-chloro-3-(trifluoromethyl)phenyl]disiloxane (XI), oil. These compds. are useful as high temperature, high dielectric constant, and low power factor materials.

IT 855-10-7, Silane, dichlorobis(4-chloro- α,α,α -trifluoro-m-tolyl)-(preparation of)

RN 855-10-7 CAPLUS

CN Silane, dichlorobis(4-chloro- α,α,α -trifluoro-m-tolyl)-(6CI, 8CI) (CA INDEX NAME)



L9 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1954:21984 CAPLUS

DN 48:21984

OREF 48:4002c-f

TI Trifluoromethylphenyl siloxanes

IN Frost, Lawrence W.

PA Westinghouse Electric Corp.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2636896		19530428	US	

AB Organosilanes containing a F₃CC₆H₄ group are prepared (1) from SbF₃ or HF and the corresponding (chloroorgano)chlorosilane, and (2) by the Grignard reaction of F₃CC₆H₄MgX with Si(OEt)₄ or SiCl₄. m-F₃CC₆H₄Br (I) 255 g. in 200 ml. absolute Et₂O was added slowly to 25 g. Mg in 100 ml. refluxing absolute

Et₂O, the solution diluted on completion of the reaction to 1 l. with absolute Et₂O, and added slowly with stirring to 166.4 g. Si(OEt)₄. Distillation of the mixture gave Si(OEt)₄ 43, [m-(trifluoromethyl)phenyl]triethoxysilane (II) 39.5, b₄ 86.5-7.5°, bis[m-(trifluoromethyl)phenyl]diethoxysilane (III) 46.5, b₁ 104-15°, m. 20°, and higher derivs. 14 g. [p-(Trichloromethyl)phenyl]trichlorosilane (IV) m. 67.5-8°, 691 prepared by the chlorination of p-MeC₆H₄SiCl₃ 492 parts with dry Cl in the presence of actinic light. To IV 99 and SbCl₅ 23 stirred rapidly and SbF₃ 127 was slowly added; distillation gave

[p-(trifluoromethyl)phenyl]trifluorosila

ne (V) 51 parts, b. 118.7°, m. -4 to -3°, n_{25D} 1.3783, d₂₅

1.399. [m-(Trifluoromethyl)phenyl]trichlorosilane (VI) 62, b₃₀

98°, and bis[m-(trifluoromethyl)phenyl]dichlorosilane (VII) 46 b₃

130°, were prepared from I 225 with SiCl₄ 340 parts. VI and SbF₃

gave [m-(trifluoromethyl)phenyl]trifluorosilane VIII, b. 118.2°,

m. -34°, n_{25D} 1.3783, d₂₅ 1.3985. [o-

Trifluoromethyl)phenyl]dimethylchlorosilane, b₁₂ 78°, was prepared

from o-F₃CC₆H₄Li with Me₂SiCl₂. III forms an oily fluid on

hydrolysis. Hydrolysis of V and VIII gave oily fluids which on further

heating at 200° became a hard, brittle solid in the case of V and a

soft thermoplastic in the case of VI. VII gave an oil on hydrolysis in a

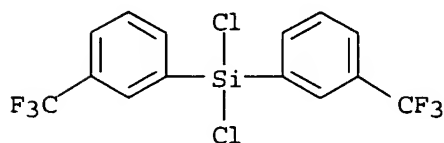
solution of alc. 50, water 50, and concentrated HCl 10 ml.

IT 565-11-7, Silane, dichlorobis(α,α,α -trifluoro-m-

tolyl)-
(preparation of)

RN 565-11-7 CAPLUS

CN Silane, dichlorobis[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1954:18452 CAPLUS

DN 48:18452

OREF 48:3391g-i,3392a-b

TI (Trifluoromethyl)phenylsilanols

IN Kohl, Charles F., Jr.

PA Corning Glass Works

DT Patent

LA Unavailable

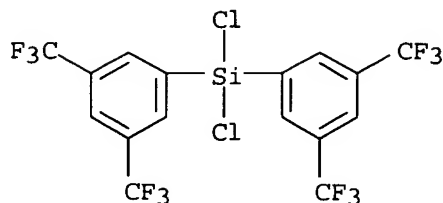
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2640063		19530526	US	

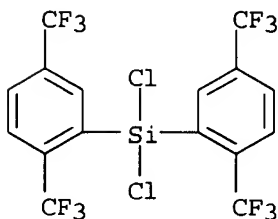
AB CF3C6H4Br (I) was converted with an equivalent amount of Mg into CF3C6H4MgBr in the presence of Et2O 500 cc./l 225 g., the solution added to SiCl4 5 equivs., the mixture kept 24 hrs. at 50°, the precipitated Mg halide filtered off, and the filtrate distilled to give CF3C6H4SiCl3 (II), b47.4 108°, n25D 1.4678; (CF3C6H4)2SiCl2 (III), b3.4 124.7°, n25D 1.4884, d25 1.4274; and (CF3C6H4)3SiCl (IV), b0.7 174.2°, n25D 1.5018. I poured into H2O containing an excess of NaOH, the solution acidified, and the precipitate heated at 150° gave a solid resin. III gave similarly (CF3C6H4)2Si(OH)2 (V), crystals, which could be condensed alone or copolymerized with Me2SiO; the self-condensed V gave very thermally-stable fluids which can be used as a coating on molten Pb to prevent oxidation. Similar hydrolysis of IV gave a silanol of exceptional stability. Heating II 1 hr. with fuming H2SO4 resulted in the removal of only 20% of the CF3 groups. A mixture of III and IV refluxed with excess 5% NH4OH gave (CF3C6H4)3SiOSi(OC6H4CF3)2OSi(C6H4CF3)3, b1 240°, b760 about 500°, n25D 1.4948, d26 1.4084. The vapor-phase bromination of a mixture of m- and p-C6H4(CF3)2 at about 800° gave a mixture of 3,5-(CF3)2C6H3Br (VI) and its 2,5-isomer (VII), separated by distillation VI converted to the Grignard derivs. and further treated with SiCl4 gave 3,5-(CF3)2C6H3SiCl3 (VIII), b1.7 55-7.2°, n20D 1.4322, d30 1.532; [3,5-(CF3)2C6H3]2SiCl2 (IX), b214 116.6°, n30D 1.4424, d30 1.567; and [3,5-(CF3)2C6H3]3SiCl (X), b1.8-2.3 156°, n30D 1.4445, d30 1.552. VIII, IX, and X were low viscosity fluids, IX and X crystallized on standing. Hydrolysis of IX gave [3,5-(CF3)2C6H3]2Si(OH)2, m. 220°, which yielded, upon heating, a viscous fluid having little flow at room temperature [3,5-(CF3)2C6H3]3SiOH (XI), obtained by hydrolysis of X, melted even higher without condensing to a siloxane. VII gave similarly 2,5-(CF3)2C6H4SiCl3, b25 about 80°; [2,5-(CF3)2C6H3]2SiCl2 (XII), b3 109.5-10°, n30D 1.4248; and [2,5-(CF3)2C6H3]3SiCl (XIII), b3 155-60°, n30D 1.4549. XII and XIII are high-viscosity fluids.

IT 432-90-6, Silane, dichlorobis[α,α,α,α',.al pha.',α'-hexafluoro-3,5-xylyl]- 567-20-4, Silane, dichlorobis[α,α,α,α',α',α'-hexafluoro-2,5-xylyl]- (preparation of)

RN 432-90-6 CAPLUS
 CN Silane, bis[3,5-bis(trifluoromethyl)phenyl]dichloro- (9CI) (CA INDEX NAME)



RN 567-20-4 CAPLUS
 CN Silane, bis[2,5-bis(trifluoromethyl)phenyl]dichloro- (9CI) (CA INDEX NAME)



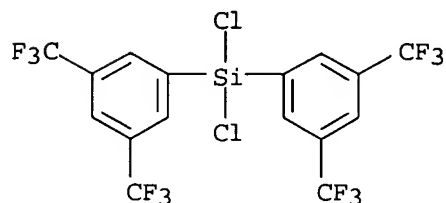
L9 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1952:67175 CAPLUS
 DN 46:67175
 OREF 46:11239f-h
 TI Organosilicon compounds
 IN Kohl, Charles F., Jr.
 PA Dow Corning Corp.
 DT Patent
 LA Unavailable
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 655105		19510711	GB	
AB	<p>Silanes are prepared from the Grignard reagents of (trifluoromethyl)phenyl bromides and SiCl_4 or MeSiCl_3. Thus, the Grignard reagent of $\text{m-CF}_3\text{C}_6\text{H}_4\text{Br}$ 1 in Et_2O and SiCl_4 5 equivs. kept 24 hrs. at 50°, the salt removed, and the product distilled yields $\text{m-CF}_3\text{C}_6\text{H}_4\text{SiCl}_3$, $b_{47.4}$ 108°, $n_{\text{D}25}$ 1.4678; $(\text{m-CF}_3\text{C}_6\text{H}_4)_2\text{SiCl}_2$, $b_{3.4}$ 124.7°, d_{25} 1.4274, $n_{\text{D}25}$ 1.4884; and $(\text{m-CF}_3\text{C}_6\text{H}_4)_3\text{SiCl}$, $b_{0.7}$ 154.2°, $n_{\text{D}25}$ 1.5018. In a similar manner are prepared: [3,5-bis(trifluoromethyl)phenyl]trichlorosilane, $b_{1.7}$ $55-7.2^\circ$, d_{30} 1.532, $n_{\text{D}30}$ 1.4322; bis[3,5-bis(trifluoromethyl)phenyl]dichlorosilane, $b_{2.4}$ 116.6°, d_{30} 1.567 $n_{\text{D}30}$ 1.4424; tris[3,5-bis(trifluoromethyl)phenyl]chlorosilane, $b_{1.8-2}$ 3 156°, d_{30} 1.552, $n_{\text{D}30}$ 1.4445; [bis(2,5-trifluoromethyl)phenyl]trichlorosilane, b_{25} 80° (approx.); bis[bis(2,5-trifluoromethyl)phenyl]dichlorosilane, b_3 $109.5-110^\circ$, $n_{\text{D}30}$ 1.4248; tris[bis(2,5-trifluoromethyl)phenyl] chlorosilane, b_3 $155-160^\circ$, $n_{\text{D}30}$ 1.4549; $\text{Me}(\text{m-CF}_3\text{C}_6\text{H}_4)_2\text{SiCl}_2$, b_{50} 115.5°, d_{25} 1.3436, $n_{\text{D}25}$ 1.4639; $\text{Me}(\text{m-CF}_3\text{C}_6\text{H}_4)_3\text{SiCl}$, b_4 123°, d_{25} 1.3535, $n_{\text{D}25}$ 1.4841. The compds. may be hydrolyzed to form thermally stable liquid silanols which do not condense readily and which are useful as heat-exchange media or in copolymerization with other siloxanes.</p>				
IT	432-90-6, Silane, dichlorobis[$\alpha,\alpha,\alpha,\alpha'$,.al				

pha.', α' -hexafluoro-3,5-xylyl]- 565-11-7, Silane,
dichlorobis(α,α,α -trifluoro-m-tolyl)- 567-20-4
, Silane, dichlorobis[$\alpha,\alpha,\alpha,\alpha',\alpha',\alpha'$ -
hexafluoro-2,5-xylyl]-
(preparation of)

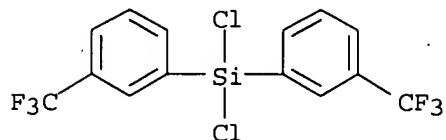
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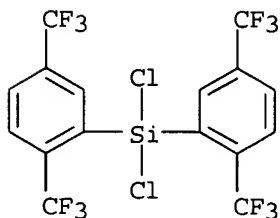
RN 565-11-7 CAPLUS

CN Silane, dichlorobis[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 567-20-4 CAPLUS

CN Silane, bis[2,5-bis(trifluoromethyl)phenyl]dichloro- (9CI) (CA INDEX NAME)



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